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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,402	07/16/2003	William J. Semper	SAMS01-00261	2926
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Docket Clerk		VU, MICHAEL T		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/620,402		SEMPER ET AL.	
	Examiner		Art Unit	
	Michael Vu		2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application:
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's Remarks/Arguments filed September 10, 2007, have been fully considered but they are not persuasive.

2. On page 9 of Applicant's Remarks, Applicant argues that "neither Rinne nor Shanbhag teaches or suggest the requiring reciving a quality-of-service profile corresponding to the mobile station or QoS controller recives the quality-of-service profiles corresponding to the mobile station form an authorization server" on lines 1-7.

In response, the examiner has been carefully reviewed the Applicant's Remark. However, the examiner must give the broadest reasonable interpretation to all claims presented that Shanbhag clearly disclosed an exemplary communication network for transmitting data packets to a wireless client 105 from a content server 110. The wireless client 105 is a mobile terminal generally associated with a user or subscriber to the communication network 100, and can comprise, but is not limited to, a mobile station, a personal digital assistant, or a laptop or palm top computer capable of engaging in wireless data communications. The content server 110 is a server computer, which can include, for example, a web server. The content server 110 is generally connected to a wired network 115. The wired network 115 can comprise, for example, a local area network, a wide area network, or the Internet. The wired network

115 is interfaced with a network 120 associated with the wireless client 105. The wireless network 120 includes a network of nodes which routes data packets to a geographic location within radio communication of the wireless client 105 and transmits the data packets over the wireless air interface to the wireless client 105. The wireless network 120 also includes a wireless content switch 125. The wireless content switch 125 is positioned in a manner to receive the data packets which are transmitted to and from the wireless client 105 (See paragraphs [0019-0021]).

Moreover, Shanbhag teaches on when the data packets are received by the wireless content switch 125, **the wireless content switch 125 determines the subscriber's level of services** and the application pursuant to which the data packets are transmitted. **The wireless content 125 then assigned a radio priority based on both the subscriber's level of service** and the application pursuant to which the data packet is transmitted. The assigned radio priority is then forwarded with the data packet for transmission over the wireless air interface to the wireless client 105 (See paragraph [0023-0027]).

Additionally, Shanbhag clearly disclosed **"during transmission from the content server 110 to the wireless client 105, connected via the backbone network in which establishes the Quality of Service which the subscriber associated with wireless client 105"** [0027-0028], and **the wireless content switch 125 examines the IP layer of the data packets for a parameter known as the type of service parameter. The type of service parameter is indicative of the type of application pursuant to which the packet is transmitted to the wireless client 105. The**

wireless content switch 125 replaces the radio priority in the data packet with a new radio priority, which is based on the quality of service parameters, as well as the type of service parameter. The quality of service parameter and the type of service parameter can be from different Open Systems International (OSI) layers [0030]. And the wireless switch content switch 125 stores the quality of service parameter, in the client quality of service indicator (See paragraph [0038]).

However, the wireless content switch 125 also includes memory for storing a quality of service table, the quality of service table 460 includes any number of records 465, each of which are associated with a particular wireless client 105. the memory 455 stores a radio priority table 490. The radio priority table 490 maps various combinations of quality of service parameters, and type of service parameters with a particular priority. Therefore, the radio priority can be based on both the quality of service parameter and the type of service parameter. The quality of service parameters and the type of service parameters can be mapped to reflect the varying customer perceptions of service based on the various applications. **For example, wherein the type of service indicates that the application is a video streaming application, a higher radio priority can be mapped, whereas a lower priority can be mapped wherein the type of service indicates email, notwithstanding the same quality of service parameter (See paragraphs [0032-0034]. And clearly disclosed based on the quality of service parameter in the subscriber profile associated with the wireless client 105 [0040].**

Furthermore, Rinne clearly disclosed In the UMTS (Universal Mobile Telecommunications System) system being defined, which system is based on the third

generation WCDMA radio interface, the initiation of a connection essentially contains the activation of a PDP (Packet Data Protocol, PDP) context. A PDP context is equivalent to allocating of a PDP address and initiating a logical contact conforming to a certain **quality of service** through an UMTS network. The **quality of service (QoS)** is defined by a group of QoS parameters defining the **quality of service**, which parameters include e.g. delay, BER (Bit Error Rate), maximum bit rate and order of service. Thus the requested and negotiated QoS parameters of one PDP context form one QoS profile as skilled in the would understand **QoS for mobile device is user profile, and an air interface parameters is (bandwidth, error rates, buffering limits, etc. Thereafter, wireless communications to and from the mobile device are using the QoS parameters** (See Col. 1, lines 43-55).

3. Therefore, the argued limitations are the same as disclosed by the reference or the limitations are written broad such that they read on the cited art, rejections are maintained as repeated below:

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanbhag (US 2003/0095527) in view of Rinne (US 6,711,141).

Regarding **claims 1, 8 and 15**, Shanbhag teaches for use in a wireless network (Figure 3), a method of providing quality-of-service (QoS) functions to a mobile station accessing the wireless network (Figures 3-5, [0023-0040], level of services), the method comprising the steps of: receiving from the mobile station a packet data call initiation signal (Figure 3, Base Station #315, received signal); sending an authorization request corresponding to the mobile station (Figures #3, Base Station to Authorization/Content Server #110, [0025-0040]); receiving an authorization message [0025-0040] and; receiving application information corresponding to the mobile station [0040]; and determining quality-of-service parameters according to the quality-of-service [0023] and the application information [0023], wherein the mobile station thereafter communicates according to the quality-of-service parameters [0009-0022].

But Shanbhag does not clearly mention on quality-of-service profile corresponding to the mobile station.

However, Rinne teaches the new functional elements of the mobile station that used different applications in which selected the plurality quality of service profiles, and includes (e.g. delay, bit error rate (BER), maximum bit rate and order of service (Col. 1, line 43-Col. 4, line 67)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shanbhag, such that quality-of-service profile corresponding to the mobile station, to support several applications that perform packet format data transfer and/or over the uplink data packets.

Regarding **claims 2, 9, and 16**, Shanbhag/Rinne teach the method of claim 1, wherein the packet data call initiation signal is received in a base station controller (Figure 3, Base Station #315) of Shanbhag.

Regarding **claims 3, 10, and 17**, Shanbhag/Rinne teach the method of claim 1, wherein the quality-of-service profile is stored on an authorization server (Figure 3, Content Server #110) of Shanbhag.

Regarding **claims 4, 11, and 18**, Shanbhag/Rinne teach the method of claim 1, wherein the quality-of-service parameters are sent to a packet data serving node (Figure 3, [0023-0040]) of Shanbhag.

Regarding **claims 5, 12, and 19**, Shanbhag/Rinne teach the method of claim 1, wherein the application information includes an application data class (Col. 4, line 4-65).

Regarding **claims 6, 13, and 20**, Shanbhag/Rinne teach the method of claim 1, wherein the quality-of-service profile includes delay, maximum data rate (Col. 11, line 11-27), and data loss rate information (Col. 1, lines 33-54) of Rinne.

Regarding **claims 7, 14, and 21**, Shanbhag/Rinne teach the method of claim 1, wherein quality-of-service parameters are determined by a quality-of-service control component [0009-0023] of Shanbhag.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571) 272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael T. Vu
Examiner

JEAN GELIN
PRIMARY EXAMINER

